

a⁵
amended. 25 (Amended). A method in accordance with claim 44,
in which said injury or disease is other than an autoimmune
disease.

a⁶ 27 (Amended). A method in accordance with claim 26,
wherein said activated T cells are autologous T cells, or
allogeneic T cells from related donors, or HLA-matched or
partially matched, semi-allogeneic or fully allogeneic donors.

REMARKS

Claims 1-46 presently appear in this case. No
claims have yet been examined on the merits. Claims 1-42 have
been subject to a restriction requirement. The official
action of March 11, 2002, has now been carefully studied.
Reconsideration and allowance are hereby respectfully urged.

The examiner has required restriction among the
following allegedly independent and distinct inventions:

Group I, including claims 1-6 and 11-19, insofar as
they are drawn to a method for protecting CNS cells from
glutamate toxicity by administering T cells which have been
activated by Cop 1 or a Cop 1-related peptide or polypeptide;

Group II, which includes claims 1-2, 7-10, and 11-
19, insofar as they are drawn to a method for protecting CNS
cells from glutamate toxicity by administering Cop 1 or a Cop
1-related peptide or polypeptide;

Group III, including claims 20-29 and 34-42 insofar as they are drawn to a method of treating injury or disease caused or exacerbated by glutamate toxicity by administering activated T cells which have been activated by Cop 1 or a Cop 1-related peptide or polypeptide; and

Group IV, including claims 20-25 and 30-42, insofar as they are drawn to a method of treating injury or disease by administering Cop 1 or a Cop 1-related peptide or polypeptide. This restriction requirement is respectfully traversed.

New independent claim 43 has now been added which is a true generic linking claim, linking all four of the groups denoted by the examiner. This claim is directed to a method for inhibiting neuronal degeneration caused or exacerbated by glutamate toxicity in the central nervous system in an individual in need thereof. Such a method of inhibiting neuronal degeneration includes the method of claim 1, drawn to a method of protecting CNS cells from glutamate toxicity, as well as the method of claim 20, drawn to a method of treating injury or disease caused or exacerbated by glutamate toxicity. Similarly, the main step of the claim is directed to "causing activated T cells, which have been activated by Cop 1 or a Cop 1-related peptide or polypeptide, to accumulate at the site of neuronal degeneration in the individual in need". As can be seen by new dependent claims 45 and 46, this language

encompasses causing the T cells to accumulate at the desired site by administering the T cells or by administering Cop 1 or a Cop 1-related peptide or polypeptide for the purpose of causing T cells to become activated thereby *in vivo* and accumulate at the site. Thus, claims 45 and 46 are now two species of the true generic claim 43. As claim 43 is effectively a linking claim, all of the embodiments of claims 1-46 should be examined in this case once claim 43 is found to be allowable. Accordingly, reconsideration and withdrawal of this restriction requirement is respectfully urged. Nevertheless, in order to be responsive, applicants hereby elect with traverse Group IV.

The examiner also states that the claims are directed to the following patentably distinct species of invention. The examiner considers Cop 1 and a Cop 1-related peptide or polypeptide to be independent and distinct. It is noted, however, that the examiner has not explained why she believes that these are distinct. Cop 1 is, indeed, a species of Cop 1-related peptides and polypeptides. They all have common properties and related sequences. Accordingly, they should not be separated. Nevertheless, in order to be responsive, applicants hereby elect Cop 1.

The examiner also considers that each of the random copolymer sequences in the definition of Cop 1-related peptide

or polypeptide are independent and distinct species, and the examiner requires election of one species for examination pending allowance of a generic claim. While it is believed that all of these species are related and form a single invention, nevertheless, applicants hereby elect the random copolymer containing four different amino acids selected from alanine, glutamic acid, lysine and tyrosine.

The examiner has also required restriction among the treatment of injury and disease. In order to be responsive, applicants hereby elect disease.

The examiner considers each of the listed injuries and diseases to be a separate patentably distinct species of the claimed invention. In order to be responsive, applicants hereby elect species "p", glaucoma.

Thus, to the extent that the ultimate species is Group IV, in which Cop 1 is administered to treat glaucoma, claims 43, 44, 46, 8, 10-20, 22, 24, 25 and 30-42 read on the elected species. Note that while claims 11-19 and 34-42 further define the Cop 1-related peptide or polypeptide, they still encompass administration of Cop 1. Furthermore, since the administration of Cop 1 for the treatment of glaucoma falls within the scope of claim 1, applicants asserts that claims 1 and 7 also read on the elected species.

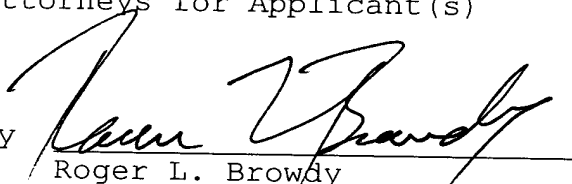
Accordingly, reconsideration and withdrawal of the restriction requirement, examination of the elected species and, once the elected species are found to be allowable, examination of the full scope of all of the claims now present in the case are earnestly solicited.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.
Attorneys for Applicant(s)

By


Roger L. Browdy
Registration No. 25,618

RLB:rd

Telephone No.: (202) 628-5197

Facsimile No.: (202) 737-3528

G:\BN\Y\YEDA\Eis-Schwartz18\Pto\AmendmentA.doc

Version with Markings to Show Changes Made

In the Title:

The title has been amended as follows:

USE OF COPOLYMER 1 AND RELATED PEPTIDES AND POLYPEPTIDES FOR
PROTECTING CENTRAL NERVOUS SYSTEM CELLS FROM GLUTAMATE
TOXICITY ~~AND T CELLS TREATED THEREWITH FOR NEUROPROTECTIVE~~
THERAPY

In the Claims

Claims 2, 4, 8-11, 21-25 and 27 have been amended as follows:

2 (Amended). A method in accordance with claim ~~1~~43, wherein the individual in need thereof is being treated post-operatively after tumor removal from or surgery on the CNS to protect CNS cells from glutamate toxicity.

4 (Amended). A method in accordance with claim ~~3~~45, wherein said ~~NS-specific~~ activated T cells are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

8 (Amended). A method in accordance with claim ~~7~~46, wherein said Cop 1 or a Cop 1-related peptide or polypeptide is Cop 1.

9 (Amended). A method in accordance with claim 746, wherein said Cop 1 or a Cop 1-related peptide or polypeptide is a Cop 1-related peptide or polypeptide.

10 (Amended). A method in accordance with claim 746, in which said Cop 1 or a Cop 1-related peptide or polypeptide is administered in a manner which promotes active immunization of the individual so as to build up a critical T cell response.

11 (Amended). A method in accordance with claim 146, wherein said Cop 1-related peptide or polypeptide is a random copolymer that cross-reacts functionally with myelin basic protein (MBP) and is capable of competing with MBP on the MHC class II molecule in antigen presentation.

21 (Amended). A method in accordance with claim 2044, in which said injury or disease comprises spinal cord injury, blunt trauma, penetrating trauma, hemorrhagic stroke, or ischemic stroke.

22 (Amended). A method in accordance with claim 2044, in which said injury or disease is Diabetic neuropathy, senile dementia, Alzheimer's disease, Parkinson's Disease, facial nerve (Bell's) palsy, glaucoma, Huntington's chorea, amyotrophic lateral sclerosis, status epilepticus, non-arteritic optic neuropathy, or vitamin deficiency.

23 (Amended). A method in accordance with claim 2044, in which said injury or disease is epilepsy, amnesia, anxiety, hyperalgesia, psychosis, seizures, oxidative stress, or opiate tolerance and dependence.

24 (Amended). A method in accordance with claim 2044, in which said injury or disease is associated with abnormally elevated intraocular pressure.

25 (Amended). A method in accordance with claim 2044, in which said injury or disease is other than an autoimmune disease.

27 (Amended). A method in accordance with claim 26, wherein said ~~NS-specific~~ activated T cells are autologous T cells, or allogeneic T cells from related donors, or HLA-matched or partially matched, semi-allogeneic or fully allogeneic donors.

New claims 43-46 have been added.